1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Pigfen 40 mg/g premix for medicated feeding stuff for pigs.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each gram contains:

Active substance:

Fenbendazole 40 mg

Excipients:

Qualitative composition of excipients and other constituents

Maize starch

Pregelatinised starch

Off-white to light yellow granules.

3. CLINICAL INFORMATION

3.1 Target species

Pigs.

3.2 Indications for use for each target species

Treatment of pigs infected with *Ascaris suum* (adult, intestinal and migrating larval stages) susceptible to fenbendazole.

3.3 Contraindications

Do not use in cases of hypersensitivity to the active substance, to other benzimidazoles or to any of the excipients.

3.4 Special warnings

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- Too frequent and repeated use of anthelmintics from the same class, over an extended period
 of time
- Under dosing, which may be due to underestimation of body weight, misadministration of the veterinary medicinal product, or lack of calibration of the dosing device (if any).

Suspected clinical cases of resistance to anthelmintics should be further investigated using appropriate tests (e.g. Faecal Egg Count Reduction Test). Where the results of the test(s) strongly suggest resistance to a particular anthelmintic, an anthelmintic belonging to another pharmacological class and having a different mode of action should be used.

The uptake of medication by animals can be altered as a consequence of illness. In case of insufficient uptake of feed, animals should be treated parenterally.

3.5 Special precautions for use

Special precautions for safe use in the target species

None.

Special precautions to be taken by the person administering the veterinary medicinal product to animals.

Embryotoxic effects cannot be excluded. Pregnant women must take extra precautions when handling this veterinary medicinal product.

This veterinary medicinal product may be toxic to humans after ingestion.

Accidental ingestion of the veterinary medicinal product should be avoided.

In case of accidental ingestion, rinse mouth with plenty of clean water and seek medical advice immediately and show the package leaflet or the label to the physician.

This veterinary medicinal product may cause eye irritation and skin sensitisation.

Avoid contact with skin and/or eyes.

Personal protective equipment consisting of goggles, impervious gloves and a disposable half-mask respirator conforming to European Standard EN149 or a non-disposable respirator to European Standard EN 140 with a filter to EN 143 should be worn when handling the veterinary medicinal product.

In case of skin and/or eye contact, immediately rinse with plenty of water.

Wash hands after use.

Special precautions for the protection of the environment

The veterinary medicinal product should not be allowed to enter surface waters as it has harmful effects on aquatic organisms.

3.6 Adverse events

None known.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See also the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy and lactation:

Can be used during pregnancy.

The safety of the veterinary medicinal product has not been established during lactation. Use only according to the benefit-risk assessment by the responsible veterinarian.

3.8 Interaction with other medicinal products and other forms of interaction

Exacerbation of paracetamol hepatotoxicity by fenbendazole cannot be excluded.

3.9 Administration routes and dosage

Oral use. In-feed use.

The veterinary medicinal product is suitable for herd medication of pigs. Administer at a dose rate of 5 mg fenbendazole per kg bodyweight.

May be administered to pigs either as a single dose of 5 mg/kg (migrating larval, intestinal larval and adult stages) or by divided dose of 0.72 mg/kg over 7 days (intestinal larval and adult stages) or 0.36 mg/kg over 14 days (intestinal larval and adult stages).

Single dose treatment

Use the following formula to calculate how much veterinary medicinal product to add per tonne of feed:

Kg	=	Bodyweight (kg)	_	
veterinary	medicinal	product per tonne	(Daily	feed intake ((kg) x 8)

7 day treatment

The standard dose rate can be divided and administered in feed over 7 days. Use the following formula to calculate how much veterinary medicinal product to add per tonne of feed:

Kg	=	Bodyweight (kg)		_	
veterinary me	edicinal	product per tonne	(Daily	feed intake (k	g) x 56)

14 day treatment

The standard dose rate can be divided and administered in feed over 14 days. Use the following formula to calculate how much veterinary medicinal product to add per tonne of feed:

Kg	=	Bodyweight (kg))	
veterinary me	edicinal p	roduct per tonne	(Daily feed intake (kg) x 112	2)

To ensure a correct dosage, body weight should be determined as accurately as possible. If animals are to be treated collectively rather than individually, they should be grouped according to their bodyweight and dosed accordingly, in order to avoid under- or overdosing.

The intake of medicated feed depends on the clinical condition of the animals. In order to obtain the correct dosage, the concentration of fenbendazole may need to be adjusted accordingly.

For incorporation into dry feed at the registered mill.

A manufacturer who is approved to incorporate veterinary medicinal products, or premixtures containing such veterinary medicinal products, directly at any concentration, must be responsible for mixing when incorporation is less than 2 kg per tonne for final feed

To ensure adequate distribution of the veterinary medicinal product in the final feed it is recommended to premix the veterinary medicinal product at a ratio of 1:10 with feed ingredients before blending into the final feed.

If the premix is used for supplementation of pelleted feed, the pelleting temperature should not exceed 85 $^{\circ}$ C.

Not to be mixed in liquid feed.

3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)

The veterinary medicinal product administered as a single 25 mg fenbendazole/kg dose for three consecutive days did not produce any clinically apparent adverse reactions in pigs. In addition, it has been shown that administration of non-formulated fenbendazole at a dose of 2000 mg/kg for 14

consecutive days was well tolerated in pigs.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance

This veterinary medicinal product is intended to be used for the preparation of medicated feed.

3.12 Withdrawal periods

Meat and offal: 4 days.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code:

QP52AC13

4.2 Pharmacodynamics

Fenbendazole is an anthelmintic belonging to the benzimidazole-carbamate group. It acts by interfering with the energy metabolism of the nematode.

Fenbendazole inhibits the polymerisation of tubulin to microtubules. This interferes with essential structural and functional properties of the cells of helminths, such as formation of the cytoskeleton, formation of the mitotic spindle and the uptake and intracellular transport of nutrients and metabolic products.

The anthelmintic affects both adult and immature stages of Ascaris suum.

4.3 Pharmacokinetics

Fenbendazole is only partly absorbed after oral administration and is then metabolised in the liver. Body clearance of fenbendazole in serum after intravenous administration to pigs at a dose rate of 1 mg/kg was 1.36 L/h/kg, volume of distribution at steady state was 3.35 L/kg and the mean residence time was 2.63 hours. After oral administration at a dose rate of 5 mg/kg the peak plasma concentration of fenbendazole was $0.07\mu g/ml$, the T_{max} was 3.75 hours and the mean residence time was 15.15 hours. The bioavailability was 27.1 %. Oxfendazole was the major plasma metabolite i.e. 2/3 of the total AUC.

Fenbendazole and its metabolites are distributed throughout the body and high concentrations can be found in the liver.

The elimination of fenbendazole and its metabolites occurs primarily via the faeces (>90%) and to a small extent in the urine and milk.

Fenbendazole is metabolised to its sulphoxide, then to sulphone and amines.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years. Shelf life after first opening the immediate packaging: 3 months. Shelf life after incorporation into meal or pelleted feed: 3 months.

5.3 Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.

5.4 Nature and composition of immediate packaging

Multiple-layer paper bag with internal aluminium/polyethylene layer of 20 kg. Polyethylene/aluminium foil/polyethylene terephthalate zipper bag of 1, 2 and 5 kg.

Not all pack sizes may be marketed.

5.5 Special precautions for the disposal of unused veterinary medicinal products or waste materials derived from the use of such products

Medicines should not be disposed of via wastewater or household waste.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection system applicable to the veterinary medicinal product concerned.

The veterinary medicinal product should not enter water courses as fenbendazole may be dangerous for fish and other aquatic organisms.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

Huvepharma NV

7. MARKETING AUTHORISATION NUMBER(S)

VPA10782/021/001

8. DATE OF FIRST AUTHORISATION

09/12/2016

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

08/12/2023

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the <u>Union Product Database</u> (https://medicines.health.europa.eu/veterinary).